

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PLB/CC/Q420	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 99/ 02673	International filing date (day/month/year) 12/08/1999	(Earliest) Priority Date (day/month/year) 20/08/1998
Applicant COMODO TECHNOLOGY DEVELOPMENT LIMITED et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of Invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

2
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

CT/GB 99/02673

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 768 373 A (GRAWROCK DAVID ET AL) 16 June 1998 (1998-06-16) the whole document	1-13
A	US 5 677 952 A (ROGAWAY PHILLIP W ET AL) 14 October 1997 (1997-10-14) abstract; figure 3 claim 20	12, 13
A	US 5 485 519 A (WEISS KENNETH P) 16 January 1996 (1996-01-16) the whole document	1-13

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

2 December 1999

Date of mailing of the international search report

10/12/1999

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
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Authorized officer

Powell, D

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 99/02673

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5768373 A	16-06-1998	EP 0894377 A WO 9742732 A	03-02-1999 13-11-1997
US 5677952 A	14-10-1997	US 5454039 A EP 0658022 A JP 7199808 A SG 44363 A US 5675652 A US 5835597 A	26-09-1995 14-06-1995 04-08-1995 19-12-1997 07-10-1997 10-11-1998
US 5485519 A	16-01-1996	US 5367572 A US 5237614 A US 5657388 A US 5479512 A	22-11-1994 17-08-1993 12-08-1997 26-12-1995

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PLB/JE/Q420	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB99/02673	International filing date (day/month/year) 12/08/1999	Priority date (day/month/year) 20/08/1998
International Patent Classification (IPC) or national classification and IPC G06F1/00		
Applicant COMODO TECHNOLOGY DEVELOPMENT LIMITED et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 6 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 19/02/2000	Date of completion of this report 13.10.2000
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Dixon-Hundertpfund K Telephone No. +49 89 2399 2857 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB99/02673

I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

Description, pages:

1-8 as originally filed

Claims, No.:

1-13 as originally filed

Drawings, sheets:

1/2,2/2 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB99/02673

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1,3,5-13 (yes)
	No:	Claims	2,4 (no)
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1,3,5-13 (no)
Industrial applicability (IA)	Yes:	Claims	1-13 (yes)
	No:	Claims	

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB99/02673

V. Reasoned statement with regard to novelty, inventive step or industrial applicability

1. For the reasons set out in Paragraph VIII(2), claims 1 to 4 will be considered as separate independent claims.

2. Reference is made to the following documents:

D1: US-A-5 677 952

3. The present application does not satisfy the criterion set forth in Article 33(2) PCT because the subject-matter of Claims 2 and 4 is not new in respect of prior art D1 as defined in the regulations (Rule 64(1)-(3) PCT), wherein in D1 (see in particular D1, abstract; column 3, lines 45-49 and column 5, lines 1-6, 29-36, lines 44-48) the user password Pu, the user associated string Ku, the secret key and the pseudo random bit string (or cryptographic object) correspond to the input password, the preselected code, the combined password and the encrypted combined password of claims 2 and 4 respectively.

4. The present application does not satisfy the criterion set forth in Article 33(3) PCT because the subject-matter of Claims 1 and 3 does not involve an inventive step (Rule 65(1)(2) PCT).

The subject-matter of Claims 1 and 3 differs from the disclosure of D1 in that the combined password (secret key in D1) is used for decrypting instead of the encrypted combined password (cryptographic object in D1).

The features of decrypting using the combined password and decrypting using the encrypted password are merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, especially as for a skilled person it is well known to encrypt or not to encrypt combined passwords used for decryption depending on the security requirements of the system.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB99/02673

5. Claims 4 to 13 do not appear to confer patentability to the claims to which they refer because their subject-matter is either known from the prior art or they define features which are a matter of normal design procedure for the skilled person.

VII. Certain defects in the international application

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor are these documents identified therein.
2. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
3. The independent claims do not meet the requirements of Rule 6.3(b) PCT that any independent claim should be properly cast in the two part form, with those features which in combination are part of the prior art (see document D1) being placed in the preamble.

VIII. Certain observations on the international application

1. The subject-matter of claims 1 and 3 are not supported by the description as required by Article 6 PCT, as their scope is broader than justified by the description and drawings. The reasons therefor are the following:

in the entire description and the figures, the encrypted code is decrypted solely using the encrypted combined password (see for example steps 204 and 218 in figure 2) and nowhere is it set out that the decryption can also be done using the combined password.

2. Furthermore, claims 1 and 2 are unclear (Article 6 PCT) as they are contradictory. In particular, claim 1 defines the decryption using the combined password while claim 2 defines the decryption using the encrypted combined password, so that claim 2 cannot be dependent on claim 1.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB99/02673

In fact claims 1 and 2 define two alternatives and therefore claims 1 and 2 will be considered in this opinion as separate independent claims.

The above also applies to claims 3 and 4, which are the method claims corresponding to the device claims 1 and 2 respectively.

PCT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 30 March 2000 (30.03.00)	
International application No. PCT/GB99/02673	Applicant's or agent's file reference PLB/CC/Q420
International filing date (day/month/year) 12 August 1999 (12.08.99)	Priority date (day/month/year) 20 August 1998 (20.08.98)
Applicant ABDULHAYOGLU, Melih	

1. The designated Office is hereby notified of its election made:

☒

in the demand filed with the International Preliminary Examining Authority on:

19 February 2000 (19.02.00)

☐

in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Pascal Piriou Telephone No.: (41-22) 338.83.38
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